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LAUNCH OF PASSENGER STEAMER CITY OF CLEVELAND.

The event of this season was the launch of the steel side wheel steamer City of Cleveland, by the Detroit Drydock Company, at their iron yard at Wyandotte yesterday at 4 o'clock. She was launched sidewise in a masterly manner, and dropped squarely into the canal, settling on a draught of 5 feet 4 inches forward and 5 feet 6 inches aft, mean draught 4 feet 10 inches. This event was witnessed by about 500 or 600 people. The steamer City of Detroit, of the Detroit & Cleveland Steam Navigation Company, for whom this magnificent steamboat has been built, for their line between Detroit and Cleveland, took a large party to see the launch, making the run from Wayne street to Wyandotte, a distance of twelve miles, in thirty-five minutes. The steamer Excelsior and a yacht, both loaded with interested people, witnessed the event beside other craft, all of which greeted the advent of the new hull in the water in a cheerful manner, customary on such occasions.

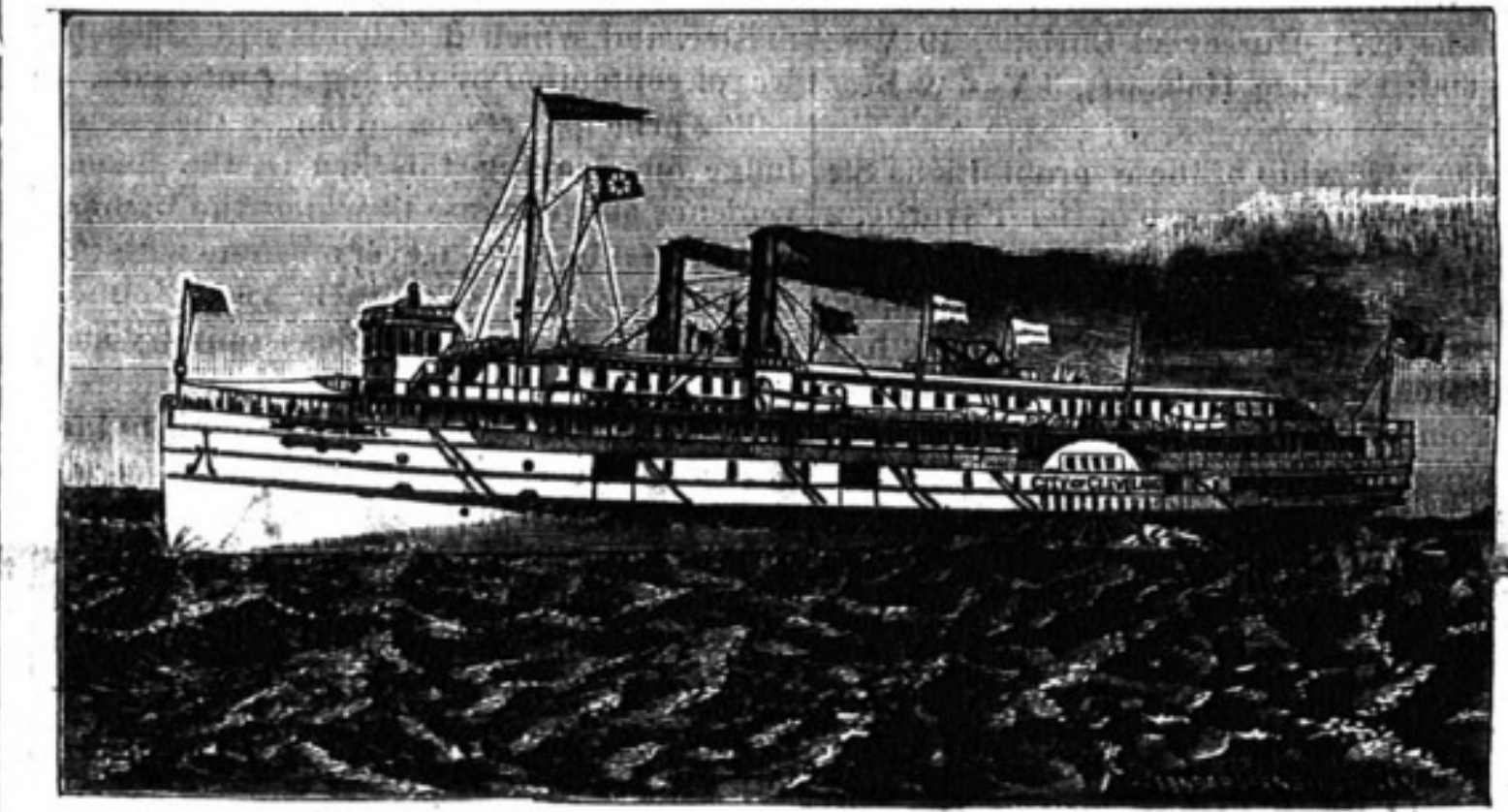
We have heretofore given the dimensions of the City of Cleveland, but as this account would be incomplete without them, they are reproduced, viz: Length of keel, 270 feet, over all 283 feet, breadth of beam 40 feet, over guards 71 feet, depth of hold 16 feet. The hull is steel, divided into five water tight compartments by steel bulk head. She will have no arches to disfigure her, and her small wheel houses will contain feathering paddle wheels. The new boat will be towed to the Detroit Drydock Co.'s upper dock on Monday, to be finished, which work will be completed in time for the boat to take her place on the route by the opening of navigation next season. The cabins and all other accommodations for passengers will be as elegant as modern skill can build and finish. Added to the usual number of cabins on passenger boats of this size, will be an extra tier of state rooms on the hurricane deck, like sound steamers, around which a balcony will run. The cabins and state rooms will be finished in mahogany and decorated in a beautiful and costly manner, and all other features of the boat will correspond, and make her the most complete and elegant that has ever been put afloat on the lakes, or any other waters. A separate cabin will be provided for passengers who are without staterooms. The dining room, kitchen and pantry will be located below the main deck. Completed she will cost about \$250,000, accommodate 2,500 passengers and have storage room for 600 tons of freight, and will carry a crew of about fifty men. Lighted by electricity, handled by steam steering gear, provided with a Providence windlass from the American Ship Windlass Co., and furnished with every useful appliance known to modern shipbuilding and engineering, she will be a craft that the Detroit Drydock Company may take pride in having been the builders, and the Detroit and Cleveland Steam Navigation Company in being the owners, a boat of beauty and an ornament to the lakes. We reproduce, by request, a fine engraving of the new steamer.

The propelling power is a low pressure beam engine of 2,400 horse power, 12 feet stroke and 66 inches in diameter, built by Messrs. Fletcher & Co., of New York, which firm built the engine on the City of Detroit. The walking beam will be supported by a wrought iron (or mild steel) galleys frame, of greater strength than that of the City of Detroit. There will be four boilers 11 feet in diameter and 11½ feet long. The boilers will be built by the Detroit Drydock Engine Works, under the supervision of Mr. Doolittle and will carry eighty-five pounds of steam. The new boat will supersede the North-west, which will probably be sold, and it is likely that the officers of that boat will be

appointed to the City of Cleveland next season.

Among the notable boats built by the Detroit Drydock Company are the following:

Name.	Tons.	Name.	Tons.
Albany.*	1,677	Iron Chief.....	1,116
Algonac.....	360	Iron Duke.....	1,152
Argonaut.....	1,118	Lehigh.....	1,505
Ariel.....	187	Massachusetts.....	1,405
Averill Wm J.....	1,182	Mascotte*.....	100
Boston.....	1,829	Merrimac.....	1,328
City of Milwaukee.....	1,148	Merrick M F.....	205
Claziont.....	1,523	Michigan.....	1,183
Excelsior.....	229	Owen John.....	328
F & P M No 1.....	534	Palmer T W.....	1,067
F & P M No 2.....	537	Roberts E K.....	190
Fortune.....	199	Syracuse*.....	1,572
Frost W L.....	1,203	Terront Nellie.....	277
Garland.....	246	Wisconsin.....	1,183
Gratwick W H.....	474	Fryer R L.....	527
Haskell W A.....	1,441	Iron Cliff.....	1,110
Hodge Saml F.....	466	Metacomet.....	819
Inter Ocean.....	1,068	Michigan.....	978
Iron Age.....	859		



PASSENGER STEAMER CITY OF CLEVELAND.

AROUND THE LAKES.

CLEVELAND.

The Colorado, which will take the Onedia's freight for Green Bay this trip, arrived this morning.

During the month of August 23,358 cubic yards of material was removed by dredges at St. Clair Flats canal.

The weather the past few days has been cool and changeable, with heavy thunder storms and rain. Wind from north to west-north-west.

W. H. Radcliff, shipbuilder, is overhauling the tug Florence N. which has been hauled out at his yard. She will get new sternposts, a new wheel and a larger engine and boiler.

Captain D. Fetterly formerly master of the scow Emily and Eliza, has quit sailing and has gone into the butcher business at Oak Harbor. The Emily and Eliza is for sale.

Captain Robert Greenhalgh has sold his steam and lighter Robert Greenhalgh Jr., to Mr. D. Barnhisel of this city for \$1500, who in turn sold it to Mr. H. Blanchard of Detroit at virtually the same price. The lighter will be taken to lake St. Clair at once.

Messrs. L. Katzenstein & Co. have been advised that their metallic packing, an advertisement of which appears in another column, has received the highest award for metallic packing at the inventors' exhibition, London. Engineer Seaman, of the Wm. Chisholm, put a set in that boat early this season. Ask him how this packing works on the lake boats.

The schooner J. J. Hill, which lies sunk between piers at Fairport Harbor, is an obstruction to navigation. The propeller Good Hit broke a wheel last week by striking the craft. Major L. Cooper Overman, U. S. engineer in charge of this district has given notice to the owners of the sunken vessel that they must remove her in thirty days or she will be removed by the government and sold with her cargo by public auction. See advertisement in another column.

At Globe drydock the schooner Genoa was searched, had a leak stopped and butts calked; schooner Kent had a leak stopped; schooner Jura will get a new keel box, new hatch over the keel box and new head ledges; steamer Marsh got some new taffrail.

United States supervising inspector of steamboats, Captain Wm. Robinson, arrived this morning to look over this local district. This is his first visit since taking charge of his office. He looks hale and hearty.

CHICAGO.

Special to the Marine Record.

A special dispatch says the schooner Hartford wheat laden, which arrived at Kingston on the 4th made the most remarkable time on record. She left Chicago on the 27th and in less than eight days sailed over one thousand miles. The Hartford is 323 tons, was built at Gibraltar by Tinn

The steambarge A. Soper, A. E. Wilds and George Dunbar are still laying in ordinary waiting for \$1.25 freights. The steambarge Hickox has received charters for several cargoes from Muskegon to Milwaukee and Chicago at that price and will carry the lumber over as soon as possible.

The schooner Orkney Lass was stripped last Saturday and laid up as her owners found it impossible to make both ends meet at the present freights.

A gale from the south last Monday night caused considerable damage to the yachts in the basin and slips, the schooner yacht Argo and cutter yacht Verve being the worst sufferers.

The steambarge Tempest went over to Grand Haven to lay up.

The schooner F. L. Danforth when laying near Division street bridge was collided with by the Monohansett, coming down the river, and received about \$50.00 damage to her starboard bow.

The fine steamship New Orleans arrived Sunday iron ore laden.

The schooner Skylark left this port Tuesday in command of Captain John Solen, Captain John F. Counce having decided to give his attention to the ship chandlery business with his partner M. Gibbs.

The barge Golden Age collided with the tug Crawford, on Monday near Lake street bridge, doing considerable damage to the tug's pilot house and breaking four stanchions and some rail and covering board. The Crawford was towing the schooner C. Foster and could not get out of the barges way.

Chicago Drydock Company. The tug Wilson Brothers was in to have a leak stopped the propeller City of Fremont to have her bottom calked, the schooner Melvina to have a leak stopped, the steambarge Monitor for calking and new brass to her stern bearing. The tug California for some new plank. The schooner Maggie Dall some calking. Barge Wm. Grandy and schooner R. B. Shippard's tops side calked.

At Miller Brothers Drydock the steambarge Tempest was in to have her stern bearings fixed, the tug J. W. Parmelee to have a leak stopped, the schooner A. Bradley for calking, the Barney to have a leak stopped the schooner B. T. Wade for calking and the tug Union for repairs to damage done to her side when in collision with the tug Satisfaction. The propeller Lora for a new wheel. The barge Mantence had her decks calked. The tug Crawford repairs to her pilot, some new stanchions rail and covering board.

The schooner W. O. Godman arrived in port Tuesday minus her large anchor and about 50 fathoms of chain, which she lost his side of Grose Point, when riding out the gale.

The schooner George M. Case, [Captain William McDonald laden with plaster, arrived at this port early Wednesday morning in tow of the tug Welcome of Milwaukee. On Tuesday morning, between seven and eight o'clock, when about half way between Milwaukee and Racine, and about 10 miles off the shore, sailing under easy canvas, as there was a heavy gale blowing, she was struck by a tremendous squall, which carried away her 3 masts, bowsprit jibboom, davets and boat, sails and gear, leaving her at the mercy of the raging billows. She drifted toward the shore and about 1 p. m. her large anchor was let go in about 10 fathoms of water. She remained there until about 5 p. m. when the tug Welcome came to her assistance and brought her to this port.

The Phenix Yacht Club's yachts Ina, Commodore T. M. Bradley; Minnie M., Vice-Commodore T. E. Miller; Zephyr, Rear-Commodore E. Hennessy; Clara B., treasurer C. E. Brown; Clio, Messrs. Martin, Taylor and Son. newend; Peri, R. P. McDonald; Owl, Messrs.

[Continued on 3d page.]

MARITIME LAW.

MASTER'S LIEN FOR WAGES.

Written for the Marine Record.

BY ROBERT RAE, OF THE CHICAGO BAR.

In a recent case decided in the district court of New Jersey, reported in the 24th Fed. Rep. 472, the case of the *M. Vandercook*, the general doctrine was asserted that the claim of a master for his wages, is not an admiralty lien. The cases quoted to sustain this extraordinary and unjust doctrine, are the ones usually quoted; they are *Willard v. Dorr*, 3 Mason 92; the *Grand Turk*, 1 Paine 73 and the *Favorite*, 2 C. Rob. 232. To these, might be added the well known case of *Phoebus v. Orleans*, 11 Peters 175. The last being regarded as one of a court of superior jurisdiction, and therefore entitled to great weight, and is in the federal courts, a controlling decision.

Perhaps there never was a doctrine so readily accepted upon presumed existence of authority, without any foundation to support it as this doctrine. With the exception of the case in New Jersey and the case of the *Monongahela*, (5 Bls. 123,) the late rulings are unfavorable to the denial of this lien and the learned judge of the district court in the latter case cautiously contents himself with saying, that the weight of authority seems to be against such a lien.

The object of this paper is to weigh these authorities and to see what gravity, or rather what lack of gravity they have, and upon what slender footing the courts have frequently adopted a ruling unjustly discriminating against the master, in favor of all other creditors of the ship, whose claims stand precisely on the same footing with the master's.

Lord Tenterden who was chief justice of England, and author of "A Treatise on Merchants, Ships and Seamen," and therefore, very familiar with the laws of England on this subject, expressed these views in reference to the master's lien.

"The proceedings in admiralty being according to the course of civil law, appear to be very unpopular in ancient times in England, and two statutes in the reign of King Richard II were passed, the latter of which declared that all manner of contracts, etc., and all other things arising within the bodies of countries, as well by land as by water, the admiralty courts shall have no cognizance, power or jurisdiction."

He then goes on to say.

"Considering these statutes in reference to the present subject, i. e. master or mariners wages, it is evident that, if the seaman's claim to wages be in reality founded on the performance of his service in the navigation of ship on the sea, the court of admiralty must have cognizance of the claim; and, on the other hand, that if the claim be in reality founded on the contract made for the performance of such service, and such contract be, as it usually is, made on shore, or in a port, or river, within the body of a country, the court of admiralty can have no jurisdiction. In this view of the subject, it is difficult to distinguish the case of the master from that of the persons employed under his command; the nature and place of the service, and the place of hiring, are in both cases usually the same."

This doctrine, by virtue of the two statutes of Richard II, which grew out of the jealousy of the law judges to the introduction of the civil law stimulated by a greed for fees placed the law of England in her maritime law as an anomaly in the general maritime law.

When the constitution of the United States was adopted, it left the Federal courts free to choose, from what fountain they would draw the sources of American admiralty jurisprudence. As descendants of Englishmen, they naturally, without much learning on the subject, dropped their buckets into English wells, and it was not till many years afterwards, as late as the year 1851, when a case arising upon the great lakes, the case of the propeller *Genesee Chief*, did the judges of the supreme court rise to the height of the great argument and assert our independence of the common law authorities of Great Britain, defining and limiting "the admiralty and maritime jurisdiction," when applied to these words occurring in the constitution of the United States, and all that class of cases that were decided under the influence of these precedents, were promptly overruled, and the fallacy of their position conclusively controverted. Among these cases were those of the *Thomas Jefferson*, 10 Wheaton 428; the steamboat *Orleans v. Phoebus*, 11 Peters 175. Nor did the overruling of these decisions stop here, but have kept due on without retreating, until we find a jurisdiction freely exercised that was once denied to the United States courts sitting in admiralty over matters occurring above waters affected by the ebb and flow of the tide, but now extended to embrace with its jurisdiction, stagnant waters in a ditch, inland and artificially locked, built as a canal and controlled exclusively by a sovereign state of the union. *Ex parte Boyer*, 109 U. S. 129; and so in cases of contracts of

affreightment, *Warring v. Clarke*, 5 Howard 441. So in cases of general average, in cases in personam upon a bond, though, at first, in *Cutler v. Rae* (7 How 729,) the court denied this under the influence of English bigotry against a jurisdiction whose simplicity and celerity of proceeding, has received the encomium of one of the brightest and best minds in America and one who was also one of her most learned and revered chief justices. *Taylor v. Carryl*, 20 How. 616.

Why this relic born of the avarice and intolerance of Lord Coke, which denied the right of the master to sue in personam or in rem, in the admiralty, should in the latter instance be still preserved in American admiralty jurisprudence, is a reproach to a nation which claims to be a just and enlightened one, it is difficult to perceive.

If the United States admiralty courts had been content to follow the desire of the English admiralty courts there could have been no difficulty. These latter courts always attempted to administer the laws of the seas in accordance with the common law of the seas. Hence, we find from time to time, the admiralty courts of England taking jurisdiction of masters' wages in rem, and as often have the common law courts restrained them by prohibition. These prohibitions however, could not reach the equity courts, there the chancellor was free to administer equity, and thus we find that there was an early distinction between the common law courts and the chancery in the manner in which they dealt with the master's wages. The courts of law refusing to recognize the lien of the master, the courts of equity recognizing it as existing by the law of the admiralty, and when the proceeds of a ship were within the registry of a chancellor, distributing them according to law of the admiralty when such law was applicable. *Reed v. Chapman*, 2 Strange 937; *Watkinson v. Bernardiston*, 2 P. Williams 367; *Hussey v. Christie*, 19 Ves. Jers. 600; *Ex parte Halcourt*, 3 Ves. & Beat 136.

Under the whip of these prohibitions Sir William Scott in the case of the *Favorite*, 2 C. Rob. 232, was constrained to dismiss the master's libel, and place the dismissal upon the ground, that the court of admiralty had been prohibited by the courts of common law from giving the master the benefit of the lien given by the maritime law.

All this is recognized by Mr. Justice Story in the case of the *Packer*, 3 Mason 264. Indeed, he contemptuously remarks in the case of *Willard v. Dorr* at page 92 in same volume, that the common law judges of England seem alike ignorant that the master could sue in personam, in the admiralty as they were of the nature and incidents of that jurisdiction. And this is the weight of authority in England up to a very late day and until Parliament established the lien.

WHAT IS THE WEIGHT OF AUTHORITY IN AMERICA?

The first case that we have any account of is that of *Boyer v. the sloop Reindeer*, Bee Admr. 116. In that case the lien was upheld. So Judge Peters with great learning, in the case of *Gardner v. Ship New Jersey*, 1 Peters Adm. 227, gave the lien, and it is also recognized in the case of the ship *Packet*, 3 Mason 255, but in this case the question was not involved. Chancellor Kent was also of an opinion that the lien should be maintained, but regarded it as a vexed and still floating one in our maritime law; vexed and floating on account of the observation of Mr. Justice Story in the case of *Phoebus v. Orleans*, a case which we will proceed to show is not authority in point; see also 2 Story Eq. Jur. sec. 1241.

Prior to rendering this decision, the case of *Willard v. Dorr* had been decided, by Mr. Justice Story, but as it was a case in personam, the question did not arise, and the only question before the court was, whether our admiralty courts should follow the English common law decisions, made after the statutes of Richard II, holding that a master could not sue in personam in admiralty for his wages. The court very properly decided that it would not follow the English common law decision, but would follow the general maritime law and permit the master so to sue. He however went out of his way to say, by way of concession, that the master could not so sue in rem. More errors have grown out of concessions made in *arguendo* in deciding a case than all others put together, the concession being on a question of law, not raised or argued in the case. Every lawyer is familiar with this, and common experience has made such concessions of no weight or authority. It possibly would have occurred to that great judge had the question been before him, as to whether he should follow the same decision of masters suing in rem, that the same reason for refusing to follow them in a suit in personam were quite as weighty in a suit in rem. This

case and the cases of the *Favorite* and the *Grand Turk* are all the cases cited by Judge Nixon in his opinion in the case of the *M. Vandercook*. In the first case of *Willard v. Dorr*, we find the question not raised, but the principle announced, and sanctified by repeated decisions, that the American courts would not respect the prohibitions issued by the common law courts to the English admiralty.

The second case is that of the *Favorite*, wherein Sir William Scott an English admiralty judge, who as such was bound to respect these prohibitions, and Judge Nixon, who was not so bound, follows him in so doing, and thus divorces his opinion from the liberal principles announced in the case of *Willard v. Dorr*. It were better to have followed this case wherein it was in point to wit; that we were not bound by these prohibitions, than to follow it wherein it was not in point, and wherein it contained meredicta, that the master could not proceed in rem, and which Sir William Scott was compelled to so find, by virtue of these prohibitions.

The next case is the case of the ship *Grand Turk* (1 Paine 73.) This was decided in 1817, and the learned judge doubts whether a master can proceed in admiralty in personam for his wages, but has no doubt that he has no lien on the vessel for his wages, reversing *Van Est*, judge of the district court, who held that he had, not only for his wages, but for disbursements made by him while abroad, but also for wages paid by him to some of the mariners after his return home. Judge Livingstone, who was the circuit judge, reversed the district judge on all these points, while he himself in every one of these particulars, for disbursements made by the master while abroad, and for wages paid by him to some of the mariners at the home port, has been reversed, leaving his decision alone to stand as to the lien of the master, and which decision is still the subject of contention by the legal profession.

The principal reason given by the circuit judge for denying this lien is, the inconvenience and expense to which the owners would be subject if on every dispute with the master, he could take their vessel out of their hands by process in the admiralty and the power which would then be conferred on him of compelling them to submit to improper charges. We all know that an admiralty lien is not a possessory one but a right in the thing, entitling him to a process in the admiralty to the thing, through which he can obtain justice and equity, and it would be no more inconvenient for the master in case of a dispute with the owners to have this right, then it would for a score of the crew to have this right, a right which is never denied them, or for the master to be without security for what is found justly to be due him, and thus on his part compelled to submit to improper denials. Nor can we appreciate the influence of the power which the master would have over such owner in a court of admiralty, whereby he would be compelled to submit to improper charges. The owner can bond the vessel in case of the master, as well as in any other case. But it is said that the master may receive the freights, and thus pay himself. If he did in fact receive such freights, and could have paid himself but voluntarily parted with his security, then it would be but the ordinary case of waiving a lien on either ship or freight, but is not ground for denying the lien in the first instance.

The last ground is, that he is supposed to contract personally with the owner, so it has been thought proper not to permit him to look elsewhere for satisfaction. But can it not be said with equal force that all personal contracts with the owner in reference to the ship, should by the same reasoning be put upon the same footing with that of the master? Remember all these reasons are assigned by the common law courts and not by the admiralty courts, and the circuit judge in adopting them, but follows the common law courts of Great Britain, and we have seen, had he followed the admiralty courts or the courts of equity, or the general maritime law, as found in the cases in Bee, and in Peters Reports, in his own country, he would have arrived at a different conclusion.

Now to the case of the steamboat *Orleans*, decided in 1837 by the Supreme court of the United States, Mr. Justice Story delivered the opinion of the court. The case was one, of which the court decided it had no jurisdiction, a decision which is now conceded to have been error. It was a cause, which was found at the time it was decided, not to be a maritime one. The master *Thomas Phoebus*, who was also owner of 1-6th part of the steamboat *Orleans*, filed a libel on account of dispossession of said vessel by the other part owner, praying an account between said part owners, and also asserted that he has a

lien on the vessel for his wages. The court found that the vessel was not engaged in maritime waters or voyages. That it had no jurisdiction in matters of account between part owners. The court found that this ground was fatal to the claim of the master, and so far, the case for some time was authority; authority, however which has been overruled as to the maritime character of the water upon which the vessel was employed. The court in this case holding, that tide water was the criterion of the character of the service. If on tide water, it was maritime; if not it was not maritime. The court then goes on to say, which is purely *obiter* "that by the maritime law, the master has no lien on the ship even for maritime wages. A fortiori, the claim would be inadmissible for services on voyages not maritime."

"Upon the whole, our judgment is that the district court had no jurisdiction of the libel or its incidents." (p. 184.)

Thus we see that the doctrine announced by the Supreme Court was merely *obiter*, the case being one in which the court was of the erroneous opinion that it had no jurisdiction on account of the services not being maritime, not maritime only by force of the common law decisions of the English courts, and which courts had issued prohibitions to the admiralty courts on account of their attempting to take jurisdiction. This court recognized the impropriety of going on to decide any principle of law denying the existence of any lien after it had decided it had no jurisdiction of the question, for upon being urged by the counsel for the master that the statutory law in Louisiana created a lien in favor of the master engaged in voyages on the Mississippi river, the court declined to entertain the question and said, "that in view of the point of jurisdiction, we do not think it necessary to decide whether, by the local law of Louisiana, the master had a lien on the steamboat for his wages or not." Now, as it is plain that for want of jurisdiction over the case, the court did not think it necessary to decide whether the master had a lien by the local law for his wages or not, it is equally plain for the same reason that it was not necessary to decide, nor was it capable to decide, whether he has such a lien by the maritime law.

So that we have no case in the Supreme Court in which they held they had jurisdiction of the cause, and having, gave or rejected the master's lien. It is no wonder then, that Judge Blodgett expresses some doubt as to the law on this subject. The weight of authority is in favor of the lien, because in all cases wherein the lien was given, the court had jurisdiction, and the point was the sole point in issue, except the case of "The *Grand Turk*," in which case we see the district and circuit judges were divided in opinion.

Where the local law gives a lien, however, in the place where the services are rendered, such lien is recognized and enforced in all cases where the master might sue in personam in the admiralty. See schooner *Mary Gratwick*, 2 Sawyer 342. In this case Judge Hoffman enforced the master's lien for wages, and advances or supplies in a case where such a lien is given by the state law where the master was hired and the services were rendered. The case was appealed to Mr. Justice Field, and on July 7, 1874, he affirmed the decision of the district judge, and this case has never been questioned or overruled.

The same principle has been applied in admiralty courts to liens existing by virtue of foreign ordinances or statutes, or where it exists by the maritime law of the country to which the ship belongs.

By the law of Germany, the master has a lien of equal degree with that of the crew. The *Groff Kilt Tranhattan*, 5 Hughes 237. It is the same with the law of the Netherlands. The *Velox*, 21 Fed. Rep. 479. It is the same in England by statute of 17th and 18th Victoria. The bark *Selah*, 4 Sawyer 40; brig *Wexford*, 3 Fed. Rep. 577. In the case of *Watkins vs. Bernadiston*, 2 P. Williams 367, "the wages of the captain and crew were held to be a lien against the proceeds of the ship, the same having been earned in a foreign port. It is the same under the laws of France, Spain and Italy. In all the above cases the lien of the master was enforced in our courts upon the grounds above stated. In the case of *Norwich vs. Wright*, 13 Wall. 104, it was said that from the fact that so many maritime powers, to wit: some 13, having adopted the limitation of liability of vessel owners, made it evident that this was the general maritime law, independent of the statute or municipal law of the country to which the vessel belonged. May it not with equal pertinence be asserted that the fact that the maritime law of all commercial countries, except England,

and now made so there by statute, that the master should have his lien upon the vessel is evidence that the master's lien exists by virtue of the maritime law, and that these statutes and ordinances are but declaratory of it, and the general doctrine now sometimes asserted by the courts of this country, that the master has no maritime lien for his wages originated in a misapprehension of what the maritime law really is on the subject. While it may be too late to recall a doctrine now creeping into the American admiralty; a doctrine that draws a distinction harsh and unjust against the master when brought into competition with a materialman's claim, when originating in the home port of the vessel, where the contract is presumed to be equally personal with the owner as that of the master, and where the master's claim is equal, if not superior to that of the materialman, and the only circumstance or fact which distinguishes the master's claim from the materialman's at the home port is that the master handles the freights and by such means has an opportunity to pay himself, a fact not usually present in the regular lines of transportation on the Great Lakes. Yet it is not too late to expose a fallacy, and by attracting the legislative and judicial mind to it, help to trample it out, or to fence it into such narrow limits, as to make it as harmless as possible.

For the complete softening of boiler feed-water and the consequent prevention of scale, the Engineer recommends pure ninety-eight per cent. caustic soda, in the form of powder. There is no difficulty in weighing out the exact quantity required for daily use, which will be instantly dissolved in cold water. All that is necessary is to put a small quantity into the feed-water. The effort is to throw down all the salts of lime that may exist in the water, and would otherwise make scale, in the form of soft mud, capable of being blown out in the usual way. Very little soda is required, a small quantity of the pure article going a long way. In ordinary cases it is estimated that about three pounds of it added to the feed water every day will keep a twenty-horse power boiler perfectly clean and free from scale. In order to ascertain the exact proportion, it is recommended to add one-sixteenth part of an ounce of the caustic soda to a gallon of the feed water, and boil it. When the sediment thereby thrown down has settled, the clear water is to be poured off and another half-drachm of the soda added. If the water remains clear, the first addition of soda has removed the lime; but, if it becomes muddy, the second allowance is necessary. In this way, remarks our contemporary, a sufficiently accurate estimate of the quantity of pure soda required can be made, and the proportion to be added to the feed water can be adjusted in the same proportion. Thus, if half a drachm of soda will soften a gallon of water, there will be used about four pounds to one thousand gallons.

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LAKE SHORE & MICHIGAN SOUTHERN.

Commencing Sunday, June 28 1885, at 12 o'clock noon the time given in the figures below is the new standard (Nineteenth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

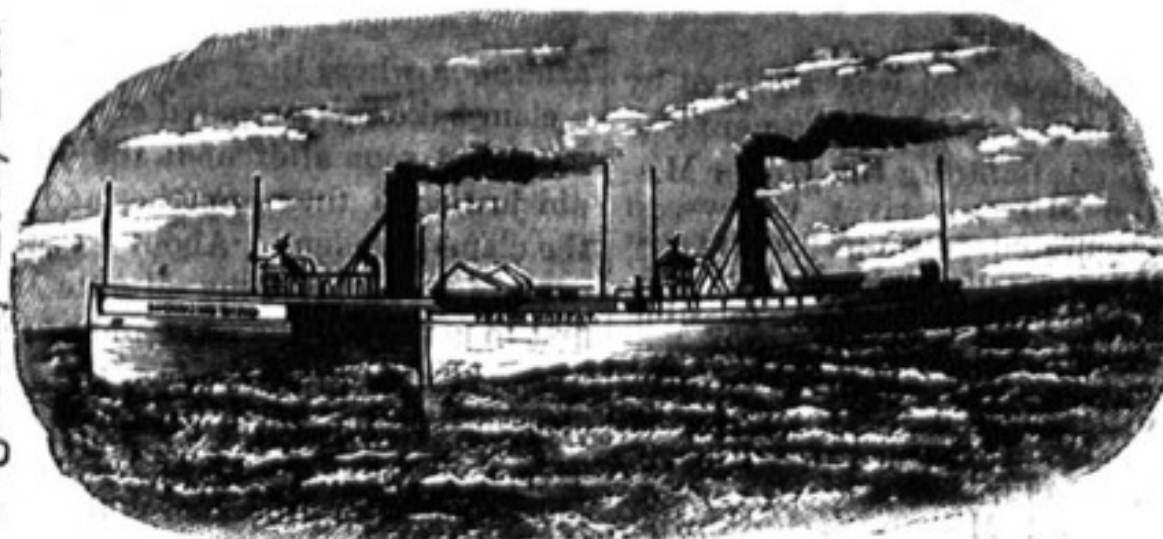
Eastward.	Arrive	Depart.
No 4, Fast Limited Express.....	2 55 A M	3 15 A M
No 8, N. Y. & A. Express.....	8 20 A M	8 45 A M
No 26, Elyria Accommodation.....	17 45 A M	18 15 A M
No 35, Buffalo Ac'com via Sandusky	10 30 A M	10 50 A M
No 35, Toledo Ac'com via Norwalk	10 30 A M	10 50 A M
No 12, N. Y. & A. Express.....	2 20 P M	2 45 P M
No 2, Night Ex via Norwalk.....	9 40 P M	10 00 P M
No 22, Night Ex via Sandusky.....	19 40 P M	19 50 P M
No 26, Conneaut Accommodation	14 25 P M	14 45 P M
Westward.	Arrive	Depart.
No 1, Fast Limited Express.....	12 15 A M	12 25 A M
No 28, Mich Express via Sandusky	2 15 A M	2 30 A M
No 3, Chicago Express via " "	26 05 A M	6 30 A M
No 25, Mich Accom Norwalk.....	16 30 A M	16 40 A M
No 21, Toledo Ex via Sandusky.....	11 50 P M	12 10 P M
No 5, St. Louis Ex via Sandusky.....	10 30 A M	10 40 A M
No 9, Chl Pac Ex via Norwalk.....	6 15 P M	6 40 P M
No 31, Elyria so to Elyria only.....	14 30 P M	14 40 P M
No 27, Conneaut Accommodation	18 10 A M	18 25 A M

Sunday train for Nottingham--Depart 8:15 a. m. and 1:45 p. m.; returning, leave Nottingham at 8:50 a. m. and 3:45 p. m.

Reference marks--* Daily, † daily, except Sunday, ‡ daily, except Monday.
A local Cleveland and New York sleeper daily on No. 12, leaving Cleveland at 2:45 p. m.; arrive Grand Central depot, New York, 10:30 a. m.
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Divers, Hawsers,
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on Orders by Wire or
Otherwise.

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RIVER QUEEN,
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Ask for Anchor Brand Blocks.
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OFFICIAL NUMBERS AND SIGNAL LETTERS.

TREASURY DEPARTMENT, BUREAU OF NAVIGATION, WASHINGTON, Sept. 4, 1885.

To the Editor of the Marine Record:

Following is a list of merchant vessels of the United States to which official numbers and signal letters were assigned by the Bureau of Navigation, Treasury Department, during the week ended Sept. 29, 1885:

Official Number.	Signal Letters.	Rig.	Name of Vessel.	Tonnage.	Home Port.
Gross.	Net.				
SAIL VESSELS.					
3,328	Sc.	B. Hufty,	10.45	9.93	Crisfield, Md.
3,330	Cat.	Ben Russell,	6.69	6.36	Patchogue, N. Y.
157,155	Sl.	Delight,	6.64	9.16	Baltimore, Md.
157,156	Sc.	Dellie,	26.65	25.32	Key West, Fla.
157,157	Sc.	Detroit,	316.20	300.30	Detroit, Mich.
85,896	Sc.	Gen. Joseph B. Seth,	10.46	9.94	Oxford, Md.
95,858	Sl.	Howard L. Leach,	10.32	9.81	Grisfield, Md.
76,595	Sc.	J. Thomas Gibbons,	10.27	9.76	do
140,782	Sl.	Lulu Bell,	9.43	8.96	do
150,356	Sc.	Petrel,	8.70	8.27	Charlotte, N. Y.
116,067	Sl.	Sarah J. Lee,	5.82	5.53	Drummondtown, Va.
81,078	K D C W	Wm. J. Lermond,	887.61	843.23	Thomaston Me.
81,079	Sc.	W. H. Albury,	10.38	9.87	Key West, Fla.
81,080	Sc.	William H. Bennett,	5.42	5.15	Crisfield, Md.
81,081	Sl.	W. H. Orris,	25.96	24.66	Drummondtown, Va.
81,082	Sc.	Walter F. Johnson,	6.42	6.10	Cedarville, N. Y.
81,083	Cat.	William F. Harned,			Patchogue, N. Y.
STEAM VESSELS.					
3,329	K D F B	Baltimore,	1432.82	1012.74	Baltimore, Md.
135,854	St. p.	Emma,	15.09	8.28	Wheeling, W. Va.
100,385	St. s.	Idalette,	17.90	8.95	Salisbury, Mass.
130,343	St. p.	Narcousee,	106.95	56.03	Tampa Fla.
116,066	St. s.	S. A. McCaulley,	92.86	46.43	Philadelphia, Pa.

JARVIS PATTEN, Commissioner of Navigation.

MADISON HOUSE, DETROIT.

The Captains' Favorite Hotel--Rates \$1.50
Per Day
Convenient to all Places of Business and
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The Nickel Plate!

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The passenger equipment of this New Trunk Line is all new and is supplied with the latest appliances necessary to safe, speedy and comfortable travel. Trains leave and arrive at the Union Depot, Van Buren street, Chicago, and N. Y. L. E. & W. R. Y. depot at Buffalo.

Following is the time in effect June 28, 1885, and until further notice:

EASTWARD.	Arrive.	Depart.
Buffalo Accommodation.....	10 40 A M	10 45 A M
Chicago Accommodation.....	9 02 P M	9 15 P M
Local Freight.....	11 45 A M	12 15 P M
WESTWARD.	Arrive.	Depart.
Chicago Accommodation.....	6 45 A M	6 55 A M
Postoria Accommodation.....	4 46 P M	4 51 P M
Local Freight.....	12 20 P M	12 50 P M

ROCKY RIVER ACCOMMODATION.
Depart--7:45 a. m., 1:35 p. m., 10:50 a. m., 2:45 p. m., 11:35 p. m.

EUCLED ACCOMMODATION.
Depart--6:24 a. m., 9:10 a. m., 6:05 p. m., 28 45 a. m., 12:15 p. m., 24 25 p. m.

Daily except Sunday. 2 Sunday only.
Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of tickets desired. Baggage checked to destination.

For information, call on nearest agent of the Company, or address
B. F. HORNER,
Gen'l Passenger Agent,
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Grummond's Mackinaw Line.

1885. Steamers of the above line 1885.
FLORA, **ATLANTIC,**
W. E. COMER, Master, J. R. JONES, Master,
LEAVES DETROIT LEAVES DETROIT
Every Tuesday, 9 p. m. Every Saturday, 9 p. m.
FOR MACKINAC, ST. IGNACE, CHEBOY-
gan, Rogers City, Crawford's Quarry, Presque
Isle, Alpena, Black River, Alcona, Harrisville, Oscoda,
Sand Beach, Forestville, Forister, Sanilac, Lexington,
Port Huron, St. Clair, and Marine City, connect-
ing at Cheboygan with steamers for Petoskey and
Charlevoix; at Mackinac with steamers for Sault Ste
Marie, Manistique, Escanaba and Green Bay.
For Toledo Steamer FLORA leaves Detroit every
Sunday evening at 9 o'clock. Returning leaves Toledo
Tuesday at 8 o'clock a. m.
For Cleveland, Lorain and Huron Steamer ATLANTIC
leaves Detroit every Thursday morning at 9 o'clock.
Returning leaves Cleveland Friday at 8 p. m.
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boats or to GEORGE CHAMBERLAIN, Agent, Dock
foot of Superior street, Cleveland, Ohio.
S. B. GRUMMOND, Owner.

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Lake Superior Iron Ore Trade, both for the season and
single trip.

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ALEX McDUGALL,
VESSEL AGENT AND BROKER,
Duluth

Owners and masters of vessels wishing to get cargoes
of grain from this port will do well to confer with me.
Will be glad to furnish information in regard to car-
goes, also in relation to docks, depth of water, etc., at
Duluth, Agate Bay (new iron ore port), Port Ar-
thur, Washburn, Ashland, and all points near the
west end of Lake Superior. Good gangs of men fur-
nished on short notice for trimming cargoes of grain,
loading and unloading all kinds of freight.

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Vessel Agent and Broker,
BOX 1616, DULUTH, MINN.

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son, Captain Miller's old crew.
Special Attention Paid to Chartering Vessels,
and seeing that they get dispatch in Port.

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Cleveland, Ohio

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THE GLOBE IRON WORKS.

SECOND HAND MARINE BOILER, in good order;
Shell, 7-16 inch iron plate; diameter, 9 feet 6 inches.
length, 18 feet; 129 tubes 4 inches in diameter, 11 feet 4
inches long, three flues 16 inches diameter; two flues 16
inches diameter, two flues 10 1-2 inches diameter; fire
box, 6 feet long, 4 feet high; steam chimney, 7 feet high
SECOND HAND MARINE BOILER four feet wide,
6 1-2 feet long, 5 feet high, sixty-four 2 1-2 inch tubes
60 inches long, cast iron breeching, good as new.
SECOND HAND MARINE ENGINE; double direct-
acting 8x8 inch cylinder, shaft and wheel for yacht or
tug; good as new. For sale at GLOBE IRON WORKS

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to the Mississippi River. Solid trains and through
sleepers to St. Louis, where direct connections are
made in Union Depot for all points west.

Practically no change of cars to the

PACIFIC COAST.

The only line to COLUMBUS AND CINCINNATI
with complete through train service, making direct
connections in Union Depots for all points in the

SOUTH AND SOUTHEAST

Tourists Tickets to numerous points, including the
ROCKY MOUNTAINS.

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Cars, A Perfect Roadbed.
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OFFICE, 173 SUPERIOR STREET, CLEVELAND, O.
D. JAY COLVER, Passenger Agent.
A. D. BROWN, Ticket Agent.
J. A. SMITH, General Passenger Agt.,

The Marine Record.

Published Every Thursday at 144 Superior Street, (Lander Building.)

A. A. POMEROY, Editor and Proprietor.

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Invariably in advance.

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CLEVELAND, OHIO.—G F Bowman, corner of Pearl and Detroit, streets.

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CLEVELAND, OHIO, THURSDAY, SEPTEMBER 10.

THE WATERWAY CONVENTION.

It is very gratifying to note the unanimity with which the St. Paul convention, in the interest of northwestern waterways, met and outlined a policy for procedure. While many sections were represented, with diverse interests, it was patent to all delegations that a comprehensive system of improvement must be inaugurated, one that would not only prove of benefit to the source of supply, the headwaters, but also to the port of destination, the point to which the produce shipped would find a market, either for consumption or for export. It was insisted upon by the convention, that this end would not be perfected in any way so readily as by indorsing the recommendations of the United States engineers in their admirable system of survey, their knowledge of the needs of the country, and the best mode of arriving at those requirements, and sustaining those recommendations for improvements before Congress. It must be borne in mind, however, that after the engineers have detailed their plans, outlined the results and made their estimates of cost, there is still much to do in order to insure speedy action on the part of Congress. That this important essential has been forgotten in the past is fully exemplified in the following table, which represents on its face the influence brought to bear by factions from different sections of the country, a free-for-all effort to get as much public treasure as possible, whether improvements were necessary to the amount asked for or not and which as we have said before, led to its final defeat.

Atlantic coast (north of Delaware river).....	\$607,000
Atlantic coast (south of Delaware river).....	1,683,500
Total.....	\$2,290,500
Gulf of Mexico (front).....	\$1,397,000
Mississippi river south of Cairo.....	\$4,027,000
Mississippi river (north of Cairo including Illinois).....	353,000
Missouri river (some 3,200 miles)....	423,900
Ohio river system.....	1,519,000
Total above Cairo.....	\$2,296,400
Total below Cairo.....	4,027,000
Southern tributaries of Ohio.....	\$692,400
Mississippi above Keokuk (1,400 miles).....	255,
Northern lake system.....	1,036,700
Red river of the North.....	10,000
Hennepin canal.....	300,000

It is not easy to understand upon what principle this bill was formulated. The localities where nature has provided ample facilities for commerce have been represented as requiring much artificial assistance at great cost, while the source of commerce, or the locality from which the produce is to be derived, has not been provided for to the extent of requirements. One-half of the entire sum named for the improvement of the Northern lake system could have been advantageously expended in the improvement of one link in that system during the present season, that of the St. Mary's river and canal the importance of which has been defined by Colonel Poe in his report, and the completion of which will require the entire sum named above for all the lakes and connecting waters. It is therefore apparent that the representatives in the next session of Congress from the northwestern states, and the states bordering the lakes,

must prepare to be aggressive for the rights of their constituents, and they must unite to attain the recognition in the river and harbor appropriation bill necessary to develop the resources of the territory which they represent.

The following memorial was adopted by the convention just before adjournment:

We, the people inhabiting the Upper Mississippi and the Missouri river valleys, in convention assembled, do most earnestly petition the Congress of the United States, when assembled, at the earliest possible moment to consider and act upon this, our memorial, in reference to waterways.

These two valleys comprise the States of Illinois, Wisconsin, Missouri, Iowa, Kansas, Nebraska, Minnesota, and the two territories of Dakota and Montana, containing an aggregate area of 744,808 square miles, or one-quarter of the area of all the states and territories outside of Alaska. That the population of these states and territories by the census of 1880 was 10,583,790 and now approximates 14,000,000, or one-fourth of the people of this country. That these people are devoted principally to agriculture, mining, stock raising, and lumbering, producing the following aggregate:

Products.	Value.
Lumber, ft.....	5,175,000,000
Wheat, bu.....	339,551,000
Corn, bu.....	1,049,374,000
Oats, bu.....	349,432,000
Barley, bu.....	19,437,974
Rye, bu.....	10,684,865
Buckwheat, bu.....	986,972
Hay, tons.....	19,099,000
Wool, pounds.....	38,610,721
Horses, No.....	5,895,765
Cattle, No.....	15,792,042
Hogs, No.....	26,052,487
Sheep, No.....	7,024,720
Gold.....	5,100,000
Silver.....	23,370,000
Total.....	\$2,409,469,000

That this product finds its principal markets in the eastern seaboard states and foreign countries, and now reach either only by paying such transportation as may be prescribed by railroad combinations, which by pooling and consolidation have destroyed all competition, or else over water routes where navigation is rendered difficult and expensive by want of harbor and channel improvements.

That these great producing states and territories are bounded on the north and east by nearly 1,000 miles of lake coast, including the upper peninsula of Michigan, from all ports of which the world might be reached cheaply, and is also penetrated in all directions by some thousand miles of navigable waterways, comprising the Mississippi and Missouri systems and Red river of the North, all of which could be improved at moderate expense, so as to reduce the cost of transportation to a minimum, greatly aid in developing our resources, building up our commerce and manufacturing interests.

That the work of surveying, examining, and estimating the cost of improving these rivers and harbors has been thoroughly and exhaustively done by engineers of the United States war department, which estimates show that the expense is insignificant when compared with the enormous results to be attained.

That as a part of this system of waterways improvements there has been devised, and the cost thereof estimated by some high authorities, certain canals designed to connect the lake system and become part of them or to avoid obstacles, which canals, if completed, would greatly facilitate trade and cheapen transportation.

That the results already attained by the United States engineers, by their work on these several rivers, harbors, and canals, with the meager amount heretofore appropriated, has been eminently satisfactory at all points, fully demonstrating the feasibility and wisdom of those plans; and we would most earnestly insist on their complete carrying out at the earliest moment by such liberal appropriations as will enable the engineers to proceed without delay.

That the cost of the work required to perfect our waterways will be far less than the value of the 35,546,207 acres of land which Congress donated the railways within our northwestern states and territories (to say nothing of subsidies and state grants) upon a plea of affording cheap transportation and in pursuance of a national internal improvement policy, while the direct and immediate benefit will be many times greater.

It is now in order for delegates from the many lake ports to meet at a central point and indorse the above memorial, adding anything that in their judgment, may be deemed wise and proper for their more immediate interests, including a recommendation relative to a line of policy the government should adopt for the relief of the merchant marine.

TWO RIVERS.

An unknown vessel, thought to be the scow Milton of Milwaukee, was wrecked near here Wednesday. The shore is strewn with sails, rigging, portions of the cabin, cordwood and cedar posts. The main part of the hull is greatly broken up. She is five miles north of the harbor piers. The life saving people think it possible that two vessels were wrecked off here. As none of the crews of either vessel have been seen it is probable that all hands are lost. The life saving crew will search for the bodies Thursday. It is reported that the Nellie Church, wood laden, is ashore, twelve miles north. She went on high and dry, and the crew jumped ashore.

[Around the Lakes Continued from 1st Page.]

Blowney and Trayler; Hercules, Capt. H. Henderson, and a large number of invited friends, among whom was your correspondent, went to South Chicago last Saturday afternoon where they lay until Sunday, when a clam bake was prepared at Capt. R. Little's hotel and soon after noon the yachting party did justice to their appetites and pronounced the clams excellent. About 4 P.M. a start was made for Chicago, the Minnie M. being the first to get out of the river and round the pier, followed closely by the Ina, the other yachts bringing up the rear. The Minnie M. continued to forge ahead and arrived in port some time before the Ina, which was second, the others arriving soon after. The weather was splendid and all expressed themselves greatly pleased with their outing.

It is reported here this (Wednesday) that the schooner Advance, with all hands except one man, was lost off Sheboygan in the heavy gale. The Advance was on her way to this port from Ahnapee with a cargo of bark. She was owned by Capt. M. Paulsen, who commanded her, Martin Pearson was mate and the crew comprised the captain's son George, two men named Holt and Edwards, another man name unknown, and John Raum, the latter being the only one saved. Capt. Paulsen recently purchased the Advance from Capt. David Dall. He resided at 181 West Erie street, Chicago, and was a man of strict integrity and well liked by his many friends.

WILLIAMS.

PORT COLBORNE.

During the storm Wednesday night the schooner Erie Wave capsized near Long Point. The woman cook named McPherson from Port Burwell, and a young man, passenger, were drowned. The balance of the crew, consisting of the captain and three men, were picked up by the steambarge Indiana and brought here.

ESCANABA.

It is reported that a loaded vessel has gone ashore on Simon's reef. It is not known what it is but she is a canaller with a dark bottom and is probably loaded with coal.

MILWAUKEE.

Special to the Marine Record.

The schooner Hattie Fisher and crew reported lost in a note in a bottle picked up at Charlevoix, is safe, having arrived here last week.

The disabled steamer City of Milwaukee will probably go to Grand Haven and the new work done at Detroit and taken to Grand Haven by rail.

Edward Finney, a fireman on the United States steamer Michigan, was accidentally drowned in the river Monday morning.

EAST SAGINAW.

Special to the Marine Record.

The tug Nat Stickney left the river Friday with dredge No. 6 of the C. S. & C. line bound for Hay Lake.

The tugs Edwin Eddy and Tom Maytham have put in the necessary fire extinguishers and life saving apparatus, and are now allowed to carry a limited number of passengers.

The tug W. S. Carlin yesterday brought up the remains of Cram's patent steam hammer that went ashore at Alabaster some time ago. It was taken to Carlin, Stickney & Cram's shipyard where it will be hauled out and repaired. It was a sad looking pile driver.

The tug Nat Stickney, towing the wrecked pile driver and two dump scows, with some valuable machinery aboard, had the misfortune to lose the two dump scows on Saginaw Bay on Wednesday night during the blow. The scows cost \$3,000 each and were only built last winter. Captain Fuller seems to be in hard luck.

The barges Spademan, Tim Baker and Star of Hope are lying in ordinary at this port.

Every sawmill, with but two exceptions, on the Saginaw river is now in full blast again, and as a matter of fact times are improving.

Freights have at last taken a turn upward and are now quoted as follows: East Saginaw to Buffalo, \$1.50, Bay City to Buffalo, \$1.37½, East Saginaw to Ohio, \$1.25, Bay City to Ohio, \$1.12½.

Captain John Henning is fitting out the tug Laketon and will take the barge S. T. Atwater to Lake Superior with lumbermen's supplies.

It is proposed to rebuild the revetment at Caroline, as recommended by Assistant Engineer Muelle. It will be necessary to appropriate between \$5,000 and \$10,000 for that purpose.

The Smith tug line is bringing numerous stave rafts to our mills nowadays, the Bay City mills having been compelled to give up a number of their contracts on account of the prolonged strike.

SHAW.

DETROIT.

Special to the Marine Record.

Sept. 8.—The most exciting incident of the season which has occurred in this locality took place at about 5:30 o'clock Sunday morning in the destruction of the steamer Island Belle by fire, yet providentially with no loss of life. The crew at the time were all on shore save the captain, S. Whipple, who slept in the cabin. The steamer was moored at the upper end of the city, having just arrived from Gibraltar, from her usual route. Not long after midnight the steamer was discovered to be on fire, notwithstanding it is averred that her fires had all been put out. After taking fire her moorings to the dock became separated when she drifted out into the stream and down the river. An alarm of fire throughout the city was given, but nothing floatable dare approach the burning wreck. She drifted, and was approaching the schooner M. P. Markablow, anchored in the stream. At this juncture a harbor tug discovered the situation and at once went to the rescue, and the appliance of her engine partially extinguished the fire and towed the wreck to shore at the lower end of the city. The Island Belle was built at Clayton, Lake Ontario, in 1875, by Johnston, is 80 tons burden, with a valuation of \$11,000. She was purchased last fall by S. Whipple and brought to Detroit to ply on the river between this city and Gibraltar, but the scheme was a failure, and did not pan out as was anticipated. In short she was in the hands of her present owners an elephant. Under such conditions it is probably as well that she is now out of the way, for if insured, as asserted, she is well sold. Captain Whipple, the owner, it is said, will lose about \$3,500. S. Whipple, master of the steamer, is a well known marine artist of this city, and an expert at whatever he undertakes; the sailor and the gentleman.

Would it or can it be believed that a steam harbor tug could be boarded and robbed of all save the chambermaid while lying safely moored alongside her dock? Strange as it may appear, such an instance is recorded in the robbery of the tug Oneida, Captain Morris Barrett, of Mills' tug line, on Sunday morning, at the foot of Bates street. Captain Barrett was snugly ensconced in his berth when the invaders sneaked a new pair of shoes and other articles of value, and at this writing the gallant captain is unaware as to how the procedure was so deftly carried out. Yet such proceedings are almost of nightly occurrence with the veritable fact that there was no watch kept on deck. We, in the meantime, live and learn.

The steamer Darius Cole has arrived here from your city, and by the numerous experts who have visited her is highly commended, and more especially in her arrangements it is conceded that there is little or no room for improvement. Captain Darius Cole, the owner, is a man of long experience in the getting up of steamboats, and although he does not claim that she will be the swiftest on the waters, time will determine how far the prognostication will be carried out. She, however, is a steamboat so far as pertains to that class of vessels.

The barge Waverly was taken to Trenton on Friday for bracing up. This announcement reads somewhat strangely, from the fact that but a short time since, it would have been recorded as the barque of that name, one of the finest of that rig on the lakes, built at Sackett's Harbor in 1853, by L. Seeley, of 344 tons burden.

The usual preparations for fall wrecking are being carried out at this port in order to be prepared for all emergencies.

The steamer Northerner took on a cargo of grain at Port Huron for Buffalo, and the result was a shortage on the trip of \$16. Such results are of almost daily occurrence, and there would appear a large hole in the skimmer somewhere. The Port Huron Elevator Company are anxious to have an investigation held, as they are satisfied that the fault does not rest the re, but at Buffalo.

The sale of the barge R. N. Rice, which took place at Buffalo a few days since, is deserving of more than a passing notice. She was formerly a side wheel steamer of the Detroit & Cleveland line, of 1,096 tons burden, and built by Campbell & Owen, at Detroit. She was for several years the favorite steamer of that route until 1877 when she was partially burned at Detroit.

Captain Pitcher, of the schooner Nevada, met with an accident a day or two since, while unloading coal, by a timber on the deck striking his head, making a serious scalp wound. A doctor patched him up and no serious result is anticipated.

The scow Geneva which met with disaster on Lake Huron a few days since, was brought to this port, and after taking off her deck load of lumber was taken to Trenton for repairs.

It has been finally determined that the re-

pairs of the steamer City of Milwaukee will not be made at this port, as the insurance companies object to her being towed here for that purpose at their risk.

The steambarge Salina underwent an overhauling at the Detroit drydock on Saturday and the railway steamer Lansdowne, in process of repairing at the same works, will be completed on the 15th.

The propeller Starucca arrived here from Buffalo with her port arch broken, which was caused by heavy weather on Lake Erie. She was taken into the drydock here and the requisite repairs made.

The tug Stranger, in ordinary for some time past, is again in commission, towing vessels through the river.

The steambarge Smith Moore, laden with ore, while approaching Hamtramck, her place of discharge, stranded on the lower end of Belle Isle. She was not long afterward released by the aid of tugs and lighters, uninjured.

The schooner Augustus Ford was libeled at this port for wages, which was in the course of a few hours settled.

The schooner Pandora, laden with coal from Buffalo for Sarnia, was eight days reaching Detroit in consequence of head winds and poor canvas.

The schooner British Lion left here on Friday in tow of the tug International en route to the Caribou Islands, Lake Superior, with supplies for the lighthouse which is being erected there. A force of fifteen men were taken on at Southampton, Lake Huron, to assist in the work.

The steambarge Ada E. Allen, had her boilers repaired at McGregor's Boiler Works, Windsor, Saturday.

The Lake Superior transit steamer St. Louis arrived down from the copper region, having on board three car loads of canned Columbia river salmon, the first shipment of the kind via the Northern Pacific and the lakes.

The schooner Cameron, consort to the steambarge Tecumseh, met with rough usage on Lake Huron while on the Canada shore, bound down. The tow arrived at Windsor Monday, when it was found she had lost a portion of her deck load of timber and had water-logged on Tuesday of last week. The tug Admiral Porter rendered assistance by pumping her out and the other repairs were made, when the tow proceeded on the voyage to Lake Ontario.

The scow Eugene Vista, which was rescued last week on the Canadian shore of Lake Huron and brought here for repairs, had four libels levied on her by the marshal. One of these was for services of steam pump, amounting to \$278; another for services while the scow was ashore, amounting to \$457, and the others were for wages. Under all this pressure it is probable she will be sold to the highest bidder ere long. Her cargo consisted of 65 cords of wood which is also seized.

The tug Hackett, which, by collision with the propeller St. Magnus, was sunk last night at the Limekiln crossing, lies right in the channel. Masters must keep a good lookout for her. The crew all saved.

Carkin, Stickney & Cram have completed their contract on the government work in Saginaw River. There will be no further work at that point until another appropriation is made by Congress. General Poe has recommended that \$165,800 be devoted to that work next year. The contract of Carkin, Stickney & Cram consisted in deepening and widening the channel from the Genesee avenue bridge, Bay City, to the mouth of the river, for which purpose the government made an appropriation of \$50,000.

The steamer City of Detroit will take from here a large party to witness the launch of the steamer City of Cleveland. HALL.

ERIE.

A drydock at this port, which has been under consideration by W. W. Loomis and others for quite a while is about to materialize. A number of interested men have visited different harbors on Lake Erie and have selected Erie as the most fitting place for the new drydock. They found the harbor at Cleveland underlaid with quicksand and that it was almost an impossibility to drive a pile there which would stand. Ashtabula harbor was next regarded as a very available place on account of its growing shipping interests. Investigation, however, revealed the fact that the floods of the spring and fall would greatly interfere with the project and therefore the enterprise could not be located at Ashtabula. Erie seems to be the favorite place because it is centrally located between Buffalo and Cleveland, has a superb harbor with good bottom and has excellent facilities for procuring lumber. The tonnage of Erie and Ashtabula alone amounts to nearly 2,000,000 tons.

BUFFALO.

Special to the Marine Record

Sept. 8.—This week came in with a dull prospect for any improvement in lake marine business. Arrivals from the upper lakes have been about a general average of the past month.

Since the commencement of this week I have to report the arrival of quite a large amount of grain. Steambarge City of Rome, 124,000 bushels. Steambarge Kasota arrived via Cleveland, where she left a portion of her cargo, which consisted of condemned rails and scrap iron, she having towed the Niagara and Scotia from Duluth to Lake Erie.

Since my last report there is no decline in freight rates on hard coal, but there is quite a scarcity of coal on hand for shipment, which causes no anxiety for tonnage at present, and many seeking loads for boats to arrive have been unable to place them, and will be for some days yet.

Nearly all the spot tonnage has been provided for at the old rates, 50c.; Chicago and Milwaukee, 40c.; Duluth and ports in Lake Superior. The Tacoma, of the Lehigh line, has been waiting two days for a load, and is not yet engaged; also schooner Scotia; steamer City of Rome and her two consorts, have been taken for Lake Superior at 40c. It is expected the tow has secured a return cargo of wheat at 2 3/4c.; steambarge Kasota and consort Niagara, the former takes lower hold of coal and deck load of rails, the latter a full load or 1,400 tons rails on contract; C. J. Kirshaw and Joseph Page, coal to Milwaukee; D. E. Bailey, coal to Chicago; R. A. Packer, coal, Chicago; schooner R. B. Hayes, coal, Chicago; V. H. Ketcham, coal, Chicago; schooner Teutonia, coal, Chicago.

In the drydocks it is so far a very dull week. In the Union dock propeller Lycoming went in for a new wheel, furnished by Trett, Son & Co.'s Iron Works, and is of the sectional pattern, the second of the kind used on any of the line boats out of Buffalo, the first having been put on the Conestoga, of the same line a short time ago, with good results. The schooner John Wesley, which was wrecked near Windmill Point, Lake Erie, nearly a year ago and afterward released and brought into Buffalo and lain in the Erie basin until a few days ago, was sold to H. J. Mills; purchase price not made known. She is in Mills' dock, undergoing repairs. The Union Drydock Company has about completed the iron work on the tug M. D. Carrington. Her total repairs will amount to between \$3,000 and \$4,000. Today in the Union drydock there are two of Hand & Johnson's tugs to fix stern bearings and calk bottoms.

The schooner F. M. Knapp, which was dismantled on Lake Erie during the latter part of August last, will not fit out this season, and she is the first vessel permanently laid up. To fit her out so late in the season at a cost of \$1,800 or \$2,000 is not thought judicious at present outlook for fall business.

On Tuesday the Union steamboat B. W. Blanchard was dismantled permanently for this season, and it is rumored that more boats of the different lines are to be laid up as they come in if business does not improve soon.

Steamer Tacoma, of the Lehigh line, after waiting four days to load, was to-day towed to coal dock to load for upper lake ports, something unusual for them and goes to show the state of the coal market in a marked degree, and how empty our calculations are on business prospects for the future, and how slim the foundations of our air castles.

The writer has had, during the past few days, several conversations with parties largely interested in the lake carrying trade and with few exceptions all agree that we have overdone that business beyond present wants, but are hopeful for the future, and that hope is founded, principally, upon the prospects of an evergrowing western country and the wants of the people with it, which would seem to be quite reasonable. But we can not shut our eyes to facts before us, nor can we estimate the drawbacks that are likely to confront us before we reach the hopeful time looked for in the near future. I desire to call attention to a very probable bar to a full realization of these hopes. We are to-day unable to find a market for our surplus cereals, and in the dark as to the proper point to place that surplus to be available when wanted, and the value we place upon that surplus prohibits a sale, consequently we have to hold it for a favorable market, not yet in sight; and the arbitrary avenue of speculation bars the way of its coming. In the meantime our lake marine is languishing for business which we are unable to remedy. In the coal trade

there is a future coming up, not yet realized, but plain in view, and from year to year it will increase. If one will but stop and think over our statistics in the hard coal trade, we find that the day and month of this year corresponding with last year there has not gone forward to our western country as much this year as last by some 12,000 tons, and yet the shippers tell us that they have all the coal in stock they want west at present and the orders are coming in very slowly. We naturally ask why it should be so. Coal freights are very reasonable and compare very favorably with other merchandise moving. Now, I say, there is a reason for it if we can but find it, and I think I see it. We must not forget that there are large deposits of coal west of the Rocky mountain range as well as east of them. Until the present year all railroads west of Washington and east of the Rocky mountains have taken their principal supply from the eastern coal deposits; but the present year shows us that contracts that existed for years were this year canceled, and supplies for them are now coming from west of the mountain range, both for railroad and domestic use and at a much less rate than can be supplied from the eastern markets; and year after year this will assuredly increase, and a steady diminution of our coal trade will be felt instead of the increase looked for on our side. We have only to hope for a large increase in products that are produced in the west and only find a market in the east; that is our best hope and greatest chance to maintain our lake trade in its condition. We have tonnage enough at present to supply that avenue of industry for at least 12 years to come.

The propeller Russia, grain laden from Chicago, arrived on Tuesday evening. The damage to her bow, caused by striking a Chicago bridge, will be repaired here.

Propeller Oneida, which arrived from Elk Rapids on Monday, was leaking some, caused by being laid up at Milwaukee. She will be calked before starting on the Green Bay route. She was libeled for \$700 for wages claimed to be due a second engineer, but was bonded and released.

Captain Davidson and David Bell are building a large tug at West Bay City, which is to have a 22 by 26 inch engine of Bell's make. The boiler, made by Tiff, is already on the ground. Captain Davidson has just finished one fine tug, which is now on the market. The schooner for Eddy Brothers and Captain Shaw is well along in construction. WM.

BAY CITY.

Special to the Marine Record.

Freights have at last taken a turn upward, a number having secured an extra shilling during the past week.

The schooner Senator Blood took lumber to Cleveland at \$1.25 from up town this week.

The barge Transport, that has been lying here nearly a month in ordinary on account of low freights, took the extra shilling and loaded for Cleveland Monday.

The iron tug Record took the barges Fostoria, J. L. Sparrow and Pacific down this trip.

Wheeler & Crane at West Bay City will launch in a couple of weeks the steambarge they are building for the Mills Transportation Company, under the supervision of Captain Alvah Neal, who is to command her. Her keel length is 200 feet, over all 215 feet, beam 36 feet, hold 14 feet. She will carry three spars. The hull is iron strapped outside with an iron arch inside. Her engine, made by the Frontier Works of Detroit, is compound, 27 and 48 by 40 inches; the shaft is to be 11 inches in diameter and the wheel 11 feet. She will have two boilers of 11-16 inch steel, each 12 1/2 feet by 12 feet. Her capacity is calculated at 50,000 bushels corn or 800,000 feet lumber.

The tug Laketon is being fitted out again and it is understood is going to Lake Superior to work on logs the balance of the season.

The passenger steamer J. C. Liken, that has been running in connection with the Saginaw, Tuscola & Huron railway from Bay Port to Helsterman Island, is to be taken off at the end of the month and will go in the shore trade.

Manager Armstrong, of the Fire Tug line, intends building a fine passenger steamer during the coming winter. It is understood the tug Fairlier's machinery is to be compounded and used.

A large amount of cedar is being brought in by the small hookers trading on the shore.

The wreck of the Cram's patent pile driver came in Thursday and passed up town in tow of the tug Carlin.

The Tittabawassee Boom Company is now in full operation again, having started up on Wednesday last. 550 men are employed

and there were nearly 700 at the Boom office the morning work began.

One of the largest fleets of the season is now loading in the river.

Wednesday afternoon a seine boat, in tow of the propeller William St. John, was capsized in the bay about twenty miles out. Ben Castanguay, a fisherman, aged 35 and unmarried, was drowned. He lived at West Bay City. The other occupant of the boat was rescued.

The steamer St. John is doing a nice business on the Caseville route at present.

The propellers White & Friant's tow will be taken care of by the tug Muske until the former has a new crank pin made.

The propeller A. A. Turner and consorts Star of the North, Senator Blood, Seminole, C. L. Hutchinson and A. J. Smith all left the river Monday for Ohio. SHAW.

AMHERSTBURG.

On the 4th inst. while the steambarge Cleveland, Captain L. Slyfield, with consort in tow, bound down Lake Erie, with a heavy sea running, was about to turn and run into Pigeon Bay, the water bottom of the boiler blew out and escaping steam scalded a deck hand named John Ward (who was below in the fire hold passing coal to the bunker) so badly that he lived but a short time. He was heard groaning, but it was impossible to reach him, and he had been dead some time when the crew were able to get him out. A fireman named Edward Dennis was severely scalded, but managed to get out. The engineer, John E. Robertson, escaped with his legs and ankles slightly scalded. The cook, named Mollie Plager, of Port Huron, is slightly scalded. The damage done to the hull is slight, but a number of pipes in the engine room and boiler are burst, and the pony engine is badly damaged. The propeller Wocoken, bound up, picked up the Cleveland and consort off Point Pelee and towed them to this port, where medical aid was obtained. The Cleveland is commanded by Captain Luther Slyfield, of St. Clair, and was bound from Bay City to Cleveland with lumber. Ward who was killed, was aged 22 years, and unmarried. The Cleveland 286 tons was built in Cleveland by Quayle & Martin in 1860 for the Northern Transportation Co. and rebuilt in 1881. She is owned by Captain L. Slyfield of St. Clair and Mr. C. C. Burnett of Cleveland, classed A2 and valued at \$18,000. She was in collision with the Maria Martin in 1865, and burned to the water's edge off Point Au Gres in the latter part of July 1880, while owned by T. P. Mason of East Saginaw, sailed by Captain Wm. Brown. She was then purchased by Captain Slyfield, who rebuilt her at a cost of \$4,000.

ADVERTISEMENT.

NOTICE TO OWNERS OF SCHOONER J. J. HILL.

U. S. ENGINEER OFFICE, CLEVELAND, OHIO, August 29, 1885. NOTICE is hereby given to owners and all other parties concerned in any manner with the schooner J. J. HILL or her cargo, now sunk in and obstructing the channel between piers at Fairport Harbor, Ohio, that they must remove said schooner and cargo from the channel within thirty days from this date. In case of failure on their part to do so, the vessel and cargo will be treated as abandoned and derelict and the Hon. Secretary of War, in accordance with the 4th Section of the Act of Congress, approved June 14, 1880, will proceed to remove the same and to sell them at public auction for the benefit of the fund for the removal of such obstructions. By order of the Secretary of War. L. COOPER OVERMAN, Major of Engineers.

CLEVELAND HARBOR, OHIO.

U. S. ENGINEER OFFICE, CLEVELAND, OHIO, September 5, 1885. SEALED PROPOSALS in triplicate, addressed to the undersigned, will be received at this office until 11 o'clock a. m., Monday, September 21, 1885, for delivering and placing eight hundred cords, more or less, of Rubble stone filling in the Breakwater, at Cleveland, Ohio. Forms, specifications and other information can be obtained at this office. The U. S. reserves the right to reject any or all proposals.

L. COOPER OVERMAN, Major of Engineers.

ICE PIER AT POINT PLEASANT, W. VA.

U. S. ENGINEER OFFICE, CUSTOM HOUSE, CINCINNATI, O., Aug. 23, 1885. SEALED PROPOSALS in duplicate will be received at this office until noon, local time, on Tuesday the 15th day of September, 1885, for furnishing material and building one Ice Pier in the Great Kanawha River, near Point Pleasant, W. Va.

APPROXIMATE QUANTITIES OF MATERIAL. 119,025 feet B. M. Oak Timber. 8,000 pounds Iron Drift Bolts. 1,600 cubic yards Riprap Stone. Specifications and blank forms for proposals will be furnished on application to this office. Letters asking specifications should be marked "Official Business" on the envelope. WM. E. MERRILL, Lt. Colonel of Engineers.

TOLEDO HARBOR, OHIO.

U. S. ENGINEER OFFICE, CLEVELAND, O., August 22, 1885. SEALED PROPOSALS in triplicate, addressed to the undersigned, will be received at this office until 11 o'clock a. m. Saturday, September 12, 1885, for dredging 130,000 cubic yards, more or less, of mud, clay, sand, etc., from a section of channel in Maumee Bay, on straight line from a point near where the present channel trends toward the east to a point near where Ottawa river or creek crosses the line of proposed channel. The quantity depending upon the rate at which the work is done. Forms, specifications and other information can be obtained at this office. The United States reserves the right to reject any or all proposals. The sum allotted for the work, inclusive of the amount necessary for superintendence and office expenses, is about \$20,000. L. COOPER OVERMAN, Major of Engineers.

HISTORY OF LAKE NAVIGATION.

BY J. W. HALL.

Written for the Marine Record:

CHAPTER XXXIV.

The steamer John Owen, Captain Ira Davis, was the first arrival at Buffalo in the spring of 1846, on April 4, followed soon after by the propeller Phoenix and steamers General Harrison and Ben Franklin. The steamer Lexington, Captain G. Appleby, which left Buffalo on that date, was the first to arrive at Detroit. There was considerable ice in close proximity to Buffalo, which remained for several days.

There was one steamer less on the lower lakes by the removal of the steamer Julia Palmer to Lake Superior, which was hauled over the portage at the Sault in the fall of 1845 and in 1846 placed in command of Captain Benj. A. Stannard.

The Boston, a fine new steamer, of 775 tons burden, built at Detroit, commenced plying early in 1846, in command of Captain W. T. Pease, who had for several years been engaged in the forwarding business at Detroit. The Boston, during a gale, was wrecked at Milwaukee in November, the same year she came out.

Soon after she commenced plying the steamer Lexington was purchased by Captain H. Randall, who assumed command of her.

The Straits of Mackinaw were clear April 9th, the steamboat Bunker Hill, Captain D. P. Nickerson, was the first to pass through, bound for Chicago.

Appointments were as follows:

Steamer Oregon, 781 tons, Captain L. H. Cotton, of Detroit.

Steamer Constellation, 483 tons, Captain W. W. Brown, of Buffalo.

Steamer Wisconsin, 700 tons, Captain A. H. Squier, of Buffalo.

Steamer DeWitt Clinton, 498 tons, Captain R. Hart, of Buffalo.

Propeller Samson, 250 tons, Captain R. L. Robertson, of Buffalo.

Propeller Princeton, 456 tons, Captain A. Pratt, of Perrysburgh.

Steamer Constitution, 448 tons, Captain A. T. Klingman, of Buffalo.

Propeller Oneida, 345 tons, Captain Sprague, of Cleveland.

Propeller Detroit, 200 tons, Captain H. Edmunds, of Detroit.

Steamboat Great Western, 780 tons, Captain A. Walker, of Huron.

Steamboat Illinois, 755 tons, Captain C. Blake, of Detroit.

Steamboat Superior, 507 tons, Captain D. Wilkeson, of Perrysburgh.

Steamboat Detroit, 350 tons, Captain E. B. Ward, of Detroit.

Propeller Racine, 150 tons, Captain Warner, of Oswego.

Steamboat Empire, 1186 tons, Captain D. Howe, of Cleveland.

Propeller Lady of the Lake, 320 tons, Captain R. Kyle, of Cleveland.

Steamboat New Orleans, 610 tons, Captain Brundage, of Buffalo.

Steamboat Nile, 600 tons, Captain A. Allen, of Detroit.

Propeller James Wood, 400 tons, Captain Westcott, of Dexter, N. Y.

Steamboat Rochester, 472 tons, Captain T. P. Folger, of Buffalo.

Steamboat Cleveland, 580 tons, Captain J. M. Lundy, of Buffalo.

Steamboat Niagara, 1084 tons, Captain T. J. Richards, of Erie, Pa.

Steamboat Saratoga, 800 tons, Captain C. C. Stannard, of Cleveland.

Steamboat London, 456 tons, Captain H. Van Allen, of Chippewa.

Propeller Hercules, 275 tons, Captain F. S. Wheeler, of Buffalo.

Propeller California, 496 tons, Captain Barton, of Buffalo.

Steamboat Romeo, 180 tons, Captain D. Webster, of Detroit.

Steamboat Fashion, 324 tons, Captain R. G. Evans, of Detroit.

Steamboat Chesapeake, 412 tons, Captain L. A. Kelsey, of Cleveland.

Steamboat United States, 366 tons, Captain H. Whitaker, of Buffalo.

Propeller Pocahontas, 420 tons, Captain Worcester, of Buffalo.

Also, brig Henry Clay, Captain J. H. McQueen; Ramsey Crooks, Captain Wood; Crispin, Captain R. Stringleman; Frances Mills, Captain B. F. Davison; St. Louis, Capt. Curtiss; Illinois, Captain R. Moore; Rocky Mountains, Captain Gardner; Hunter, Captain John Browning; O. Richmond, Captain Johnson; A. R. Cobb, Captain McKinty; Thomas Corwin, Captain J. W. Hall; Swan, Captain Dunbar; Michigan, Captain R. Dill; Constitution, Captain Walte; Ellen, Captain D. Fuller; Home, Captain J. Igoo; H. H. Sizer, Captain John Martin; Agnes Barton, Captain James Averell, etc., etc.

The steamer Detroit, new that season, was advertised to ply between Detroit and Sault Ste. Marie, calling at Mackinac.

The steamer General Scott, commanded by Captain John Scott, early in the season burst her boiler, near Mackinaw, killing one man and two others were badly scalded.

Robert Turner, a seaman on board the schooner Trader, was knocked overboard by the boom and drowned in the St. Clair river.

The steamboat Bunker Hill collided with the brig Fashion on Lake Erie, near Fairport. The steamer towed the brig into that port in a sinking condition, while the steamer had a hole stove in her bow, a part of her

larboard wheelhouse and a portion of her cabin carried away. The vessel was freighted with 8,000 bushels of wheat beside a quantity of flour.

B. G. Stinson, of Detroit, had built that season, on the River St. Clair, a fine brig, 96 feet long, 24 feet beam, and 9 feet hold, named the David Smart, after one of Detroit's oldest citizens. Captain G. Appleby also had built at Algonac a steamer, 280 feet long, 30 feet 5½ inches in breadth, and 14 feet depth of hold, which was named the Sultana; Z. Palngburn, master-builder. She was provided with one of Secor's New York square engines, 50 inch cylinder and 12 foot stroke. There was also built and launched a new boat of 450 tons burden, at Newport, on the River St. Clair, for Captain Ward, which was named the Samuel Ward.

The propeller Cleveland ran into and sunk the schooner Marshal Ney in Cleveland harbor. The Ney was laden with limestone, and owned by Mr. Eldridge, of that port.

The market for breadstuffs, owing to a combination of adverse circumstances, was very much depressed. In the month of June wheat ruled at 78c. per bushel, corn, 33½c. and 34c., rye, 55c., high wines at 17c., butter prime, 7½c., mess pork, \$9.50 per bbl., beef mess, \$6.00, flour, \$3.00 and \$3.12½, potatoes per bu. 25c., white fish, per bbl., \$7.00, hay, \$7 and \$8 per ton, wool prime, 18 to 25c., barley 50c. per bu., Hamburg cheese 8c. per lb.

From some cause much more than usual sickness prevailed among seamen throughout the lake region, chiefly chill fever, which was especially noticed in the papers at all lake ports. The schooner General Houston arrived at Cleveland with the entire crew sick, and it was with much difficulty that the vessel was navigated into port. Another vessel's arrival was noted with five of the crew sick, two of them so bad that they had to be carried ashore for medical treatment.

Mr. George Mills, in charge of the government dredge at St. Clair flats, registered the number of vessels passing both ways for the month of July, 1846, as follows: Steamboats, 71, propellers, 37, brigs, 59, schooners, 128, coasters, 81. Total for the month, 384. There were 31 of all classes grounded and had to be lighted over. In the month of June a greater number passed over and a greater number stranded than in the month of July.

In the spring of 1845 Lake Superior was navigated by only three small schooners which were reinforced ere long by one steamboat, one propeller, and ten schooners, with a ratio increase in 1846.

Unlike former years the elements were terribly destructive to life and property, commencing in the month of March, before the opening of navigation, caused by an ice blockade in Buffalo harbor, which was without a precedent in lake annals, and with the close of the season the record by no means diminished from that of former years, and of the fall events the loss of the steamer Helen Strong, a boat in her second year, contained as thrilling a record as was ever before narrated. The Helen Strong became a total wreck a short distance above Barcelona. She left Buffalo for Toledo on Thursday, November 20, 1846, about noon, with a large number of passengers and a heavy freight of merchandise, mostly for Erie. When in sight of that port she was struck by a heavy beam sea which parted her rudder chain. The after cabin was being cut away in order to ship a tiller, when one of her steam pipes burst and let all her steam escape, but no one was injured by the explosion. Her anchor was dropped, to which she swung for half an hour, when the chain parted, and at about 10 o'clock at night she struck a rocky shore which arose perpendicularly some 30 feet above her hurricane deck. After striking two or three times she broke in two places, and settling in the sand, remained stationary under the cliff. The first sea that struck her after she settled, carried away the whole weather side of her cabins, making a clean breach through and through her. Every light had been extinguished by the sea and the night being horribly dark, no one, unassisted, could scale the cliff, and to remain on the wreck seemed quite impossible. At this critical moment it was ascertained that at the first time the boat struck the rock and when she was high upon the wave, one of the wheelmen and the second engineer, with a small cord, had made the fearful leap against the rock and, fortunately, without knowing anything of the place and not able to see anything for the darkness, they caught the root of a tree that had run far below the surface, by the aid of which they scaled the heights. The wheelman went immediately in search of help and lights, and the engineer dropped his rope to the deck of the wreck, directing

it to be made fast to some light man. It was done, and the man at the top drew up the man from the wreck, and the two drew up the third, and so on, until some sixty men, women and children, were taken up. Many of the passengers, especially females, were badly lacerated by being hauled so rapidly up those pointed crags. One infant three weeks old, was drawn up without injury. The rope was thrown down and no one seized it, and after frequent and loud calls from the people on the cliff it was presumed that all were saved who were alive, but on visiting the wreck the next morning several were found alive and taken off. The number of passengers on the boat was not known and of the dead bodies of those washed off the wreck none were ever found. One woman perished during the night and was washed overboard. Mr. B. Joy, of Sylvania, was seriously injured by the breaking of the rope when being drawn up. His leg and collar bone were broken, but he fell on the deck and was again drawn up and saved. The cliff against which the boat struck was 50 feet high. The engineer, Mr. Munson, above spoken of, was found equal to the emergency; the captain or the mate were not even spoken of in the terrible ordeal.

In the above fearful night the schooner Lexington, Captain Peer, cleared from the port of Cleveland for Port Huron, freighted with 110 bbls. of whiskey, 53 tons of coal, and 2 boilers, the shippers being Pease & Allen, Winslow & Co., and A. Smith. The schooner foundered in the vicinity of the islands, where subsequently portions of the wreck were discovered. The crew, including the captain, consisted of six persons, all of whom found watery graves. The small boat and some 100 lbs. of whiskey came ashore near Vermillion, Ohio. None of the bodies were ever found.

Included among the above fatalities was the loss of the brig Osceola, Captain Horace Snow, wrecked near Silver Creek, and of the crew on board four were drowned and the captain died on board from injuries received.

Captain Joseph Tubbs, his son and a lad named Read, all of Conneaut, were lost with the sloop Bayona above Erie, Pa.

A MARINE GOVERNOR.

MARQUETTE, MICH., August 31.

To the Editor of the Marine Record.

The function of a steam engine governor is to preserve a uniform speed in the engine by varying the supply of steam as the work on the engine varies, which is an object of paramount importance, particularly as in case where, in consequence of the peculiar character of the work, it is found impossible to confine the variation of power within narrow limits.

Mr. Joseph Cosford, a popular marine engineer, now chief engineer of the Marquette Water Works, with the assistance of Superintendent Kern, has invented a governor in which the fly-balls, commonly used in centrifugal governors, are dispensed with and the principle of hydraulic pressure is adopted.

The governor consists of two brass cylinders, each 1¼ inch in diameter and about 3 inches long, into which pistons are fitted which terminate in a crosshead above the cylinders. From the crosshead the power is transmitted through a connecting rod to the lever by which the governor valve is actuated. By means of a thumbscrew the power can be applied to the lever at any distance from the fulcrum where it will act to the best advantage. From the feed pump a pipe, ¼ inch in diameter, is led off to the cylinders of the governor through which the pressure on the pump is transmitted to the pistons. From the cylinders of the governor a pipe is led into the bilge or overboard. Each of these pipes has a valve by which the pressure on the pistons can be regulated. Previous to the invention of this governor, centrifugal force has received the most attention, and nearly all governors have been constructed on that principle.

All marine engines, especially screw engines, are liable to sudden fluctuations of speed, owing to varying immersion of the propeller when running in a rough sea; and the necessity of employing some kind of governor to overcome these irregularities is needed. The common form of fly-ball or centrifugal governor, used on land is impractical to such a purpose, as the balls will open or close with the heaving of the ship. Many kinds of marine governors have been tried and abandoned on this account; but it is no longer a doubt, in the opinion of the writer, that the speed of a marine engine can be regulated so as not to vary to exceed two revolutions a minute.

Mr. Cosford's governor is very desirable for marine purposes on account of the simplicity of design, fewness of parts, and compactness of form.

RAFTING ON THE UPPER MISSISSIPPI RIVER.

Written for the Marine Record.

BY THE SECOND ENGINEER.

PART IV.

In order to fully comprehend the conditions of a raft floating at night it will be necessary to describe the action of the water in the river, the formation of bars, and their relation to the water's draft. When the small tributaries that go to supply the Mississippi with water are up, the Mississippi is correspondingly raised, and the bars in very high water are covered up to a depth to enable a floater to "go right down the middle" anywhere. The water commencing to fall, although still over the bars, a floater would naturally follow the deep water, because the draft would pull away from the bars and make the passage over them almost impossible.

Now, the condition of a log raft and a lumber raft, as regards flanking, is entirely different. In the serpentine channel of the upper end of the river, a log raft floating sluggishly, as they do, would swing herself into the current, and with a cross pull occasionally, (a cross pull is to pull the bow one way and the stern the other), would float for hours, while a lumber raft, heavier and a faster floater, would start from a reef with such rapidity as to pass beyond the limit of the channel, and unless impeded by the resisting oars, would doubtless go into the opposite bank. As an illustration: Suppose upon the right hand there is a deep bend, while upon the left hand is a bar. In such case it is necessary to pull close up to the bar in order to keep out of the bend, remembering that where the point extending into a bend is a bar, there is always a draft leading straight from the bar toward the bend. The shaping of the raft in the channel was termed pointing, for it is a strange fact that a raft would float endwise where she would not float, if she lay quartering or side wise. As the current of the river is different at different points, so too, would the speed of the raft be correspondingly different, hence, sometimes a pilot would get too far out on the bar, where the current was sluggish; while another pilot, by holding down the bend, would pass him under way. At night sometimes it would be difficult to tell which way the raft was flanking, in which case the pilot would put a pole down in the water and by that method not only determine the motion of his raft, but also determine the necessity of pulling or not. Sometimes the pilot saved himself a hard stick on a bar by putting down a "growser," which consisted in each man grasping a board and shoving it down end wise, between the cribs of lumber. These boards would stick fast in the sand and stop the raft. An interesting part of rafting was sticking, and in low water there was plenty of it done, for sometimes it took days to get off again. If not stuck too hard they might "crab" off, a crab being a sort of portable windlass, by which, with a line run ashore they would pull themselves clear. Unable to thus extricate themselves, they resorted to hand spiking, when every man would leap overboard and actually lift the raft from the bar, which in lumber meant breaking the raft in the cribs, and with logs it was taking log at the time. Men thought nothing of this, and would work for twenty hours in water in the month of November as quickly as in the month of June.

The most serious trouble, and cause of much sickness in early days was the lack of ice, hence for water to drink they would take their supply from the many springs that abound along the rocky bluffs of the upper river. This frequent change had a deleterious effect upon the men, yet they were, as a body, a rugged, hardy set who generally floated all summer and worked in the woods all winter.

There are many tales extant of the tricks played upon the unsuspecting pilots while floating at night, and as an illustration I will relate one, as both the actors are yet living, though the victim has long ago retired from the river. Captain N. B. Lucas, now master of a steamboat, was running the line for a then celebrated French pilot; a pilot celebrated not so much for his skill as for his eccentricities of character. It was a dark night and the raft was floating in a very slow piece of river, the boys asleep at their oars, with one man awake to call them to pull, which in this case was Lucas. For several hours he had gotten his men out at each call, which grew more frequent as the night wore on, and the pilot grew uncertain from his long vigilance, until for a time or two the response was made in word only; that is, the word came back, but no one pulled. I am speaking of the stern crew, the bow crew being under the immediate eye of the pilot. At last as they glided along close to a willow bank, some one jumped ashore with a line, and Lucas took the turns and soon had the raft fast. When all the men went to sleep. Still at regular intervals came from the drowsy pilot the word "Right," and after awhile "h-o-l-d" would go floating back as the word was drawn out. Then would be heard "L-e-f-t," to which Lucas would respond, "L-e-f-t," while the boys, in the sacred profoundness of sleep, heard nothing save the echoing sounds from dreamland. Finally, after over an hour the pilot ran his pole down and finding the raft stopped, imagined her stuck until he walked astern and saw what had been done, when he, too, turned in, not without an earnest protest against the man "who tie my rat" up.